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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,078	08/17/2006	Felix Henric Govert Ogg	US040130	9850

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
P.O. BOX 3001
BRIARCLIFF MANOR, NY 10510

EXAMINER	
TECCO, ANDREW M	
ART UNIT	PAPER NUMBER
3764	
MAIL DATE	DELIVERY MODE
06/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/598,078	OGG ET AL.	
	Examiner	Art Unit	
	Andrew M. Tecco	3764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 April 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *8 and 15* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7, 9-14, and 16-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 16 April 2009 and 10 April 2009 has been entered. Claims 1-20 are pending. Claims 8 and 15 have been cancelled by the applicant. An action on the merits follows.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. **Claims 1, 3, 4, 6, 7, 9, 11, 12, 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lee et al. (US Patent 6,837,827)** hereinafter referred to as **Lee** in view of **Curtin (US Patent 5,986,200)** in view of **Lauffer et al. (US Patent 5,215,469)** hereinafter referred to as **Lauffer**.

Regarding claim 1, Lee discloses an audio pacing device (**10**), comprising:

a sensing unit (**40**) to obtain a parameter of a user in physical exercise;

a memory (**64**) to store a plurality of audio signals (**col. 9 lines 26-30**) having predetermined tempo values; and

a processing unit (**60**) configured to determine whether intensity of the parameter of the user should be increased, decreased or maintained by using the parameter of the user from the sensing unit and a predetermined reference value (**col. 9 lines 21-26**), and select an audio signal having a tempo that enables the user to increase, decrease or maintain the intensity (**col. 9 lines 26-50**), the processing unit being configured to adjust the tempo of a selected audio signal up to a predetermined percentage of the predetermined tempo value (**col. 9 lines 51-66**).

Although the examiner considers Lee to disclose a plurality of audio tones and music stored on the device, Curtain further teaches that it is known to have an interactive music playback device in which the audio signals are stored on a memory unit (**Abstract**).

Given the teachings of Curtain, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the audio signal files of Lee stored on a memory. Doing so would allow the device to playback the sounds without relying on a separate device.

Although the examiner considers Lee to disclose a the processing unit being configured to adjust the tempo of a selected audio signal up to a predetermined

percentage of the predetermined tempo value, Lauffer further teaches that it is known to have a processing unit (**100, 110**) configured to adjust the tempo of a selected audio signal up to a predetermined percentage of the predetermined tempo value (**figs. 3 and 4; col. 4 line 62 – col. 5 line 34**). In the example given, the tempo is increased 150% of the original.

Given the teachings of Lauffer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the processor of Lee with the tempo control means of Lauffer. Doing so would allow the device to be programmed to achieve specific rates of tempo and better guide the user toward a specific pace.

Regarding claim 3, Lee discloses parameter is a step-speed rate (**col. 9 lines 33-41**).

Regarding claim 4, Lee discloses the tempo comprises a beat (**col. 9 lines 54-61**). Lee doesn't disclose the beat per minute values of such rhythms, but it is inherent to any beat/rhythm that it has a beat per minute value.

Regarding claim 6, Lee discloses the sensing unit is a step-speed measurement unit (**col. 9 lines 33-41**).

Regarding claim 7, Lee discloses the sensing unit (**40**) and the processing unit (**60**) are connected in a wired or wireless way (**fig. 1; col. 6 line 57 – col. 7 line 12**).

Regarding claim 9, Lee discloses the predetermined reference value includes reference values selected by a user or a programmed exercise routine (**fig. 12; goal information; col. 9 line 51 – col. 10 line 7**).

Regarding claim 11, Lee discloses the predetermined tempo values of the plurality of audio signal are determined by the audio pacing device (**col. 9 lines 38-60**). The examiner is broadly interpreting the term "tempo value" to mean an inherent property of a beat or rhythm that relates to a general speed at which a sound occurs.

Regarding claim 12, Lee discloses stored audio signals, but fails to disclose the format of the signals.

However, Curtain teaches using an MPEG-4 format to store audio signals (**col. 3 lines 1-22**).

Given the teachings of Curtain, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the MPEG-4 file format of Curtain with the audio signals of Lee. Doing so would allow the device to hold a large number of audio signals in a relatively small amount of memory.

Regarding claim 20, Lee discloses an audio pacing device, comprising:

a sensing unit (**40**) to obtain a parameter that is representative of a status of a user in motion;

a memory (**64**) to store a plurality of audio signals having predetermined tempo values; and

a processing unit (**60**) configured to determine whether the parameter should be increased, decreased or maintained by using the parameter from the sensing unit and a predetermined reference value, and select an audio signal having a tempo that enables the user to increase, decrease or maintain the parameter (**col. 9 lines 51-66**), the processing unit being configured to adjust the tempo of a selected audio signal up to a predetermined percentage of the predetermined tempo value (**col. 9 lines 51-66**).

Although the examiner considers Lee to disclose a plurality of audio tones and music stored on the device, Curtain further teaches that it is known to have an interactive music playback device in which the audio signals are stored on a memory unit (**Abstract**).

Given the teachings of Curtain, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the audio signal files of Lee stored on a memory. Doing so would allow the device to playback the sounds without relying on a separate device.

Although the examiner considers Lee to disclose a the processing unit being configured to adjust the tempo of a selected audio signal up to a predetermined percentage of the predetermined tempo value, Lauffer further teaches that it is known to have a processing unit (**100, 110**) configured to adjust the tempo of a selected audio

signal up to a predetermined percentage of the predetermined tempo value (**figs. 3 and 4; col. 4 line 62 – col. 5 line 34**). In the example given, the tempo is increased 150% of the original.

Given the teachings of Lauffer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the processor of Lee with the tempo control means of Lauffer. Doing so would allow the device to be programmed to achieve specific rates of tempo and better guide the user toward a specific pace.

5. **Claims 2, 5, 10, 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lee et al. (US Patent 6,837,827)** hereinafter referred to as **Lee** in view of **Curtin (US Patent 5,986,200)** in view of **Lauffer et al. (US Patent 5,215,469)** hereinafter referred to as **Lauffer** in view of **McHugh (US Patent 6,230,047 B1)** as taught by **Richardson et al. (US Patent 6,135,951)** hereinafter referred to as **Richardson**.

Regarding claim 2, Lee discloses an audio pacing device (**10**) with a first sensing unit (**40**) and a first parameter (**col. 9 lines 38-41**) and a switch (**fig. 2; #56**) to alternate between different modes of use (**col. 5 lines 29-38**).

Lee in view of Curtin in view of Lauffer doesn't disclose wherein the parameter is a pulse rate.

However, McHugh teaches another audio pacing device (**10**) with a different mode of operation having an alternate sensing unit (**20**) and a pulse rate parameter (**Abstract; col. 5 line 61 – col. 6 line 6**).

Since Richardson teaches that during an exercise event a user would be concerned with speed pacing and heart rate (**col. 1 lines 8-30**), it therefore would have been obvious to one of ordinary skill in the art at the time the invention was made to include McHugh's sensing unit and parameter as an alternate / second mode in the device of Lee. Doing so would allow the user to be aware of their speed pacing as well as heart rate during an exercise routine.

Regarding claim 5, Lee discloses an audio pacing device (**10**) with a first sensing unit (**40**) and a first parameter (**col. 9 lines 38-41**) and a switch (**fig. 2; #56**) to alternate between different modes of use (**col. 5 lines 29-38**).

Lee in view of Curtin in view of Lauffer doesn't disclose wherein the sensing unit is a heart rate monitor.

However, McHugh teaches another audio pacing device (**10**) with a different mode of operation having an alternate heart rate monitor sensing unit (**20**) and a pulse rate parameter (**Abstract; col. 5 line 61 – col. 6 line 6**).

Since Richardson teaches that during an exercise event a user would be concerned with speed pacing and heart rate (**col. 1 lines 8-30**), it therefore would have been obvious to one of ordinary skill in the art at the time the invention was made to include McHugh's sensing unit and parameter as an alternate / second mode in the device of Lee. Doing so would allow the user to be aware of their speed pacing as well as heart rate during an exercise routine.

Regarding claim 10, Lee fails to disclose the audio signals are categorized based on their tempo value.

However, McHugh teaches the audio signals are categorized based on their tempo value (**col. 5 lines 1-9**).

Given the teachings of McHugh, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the categorization of tempo values of McHugh with the invention of Lee in view of Curtain in view of Lauffer. Doing so would enable the processor to have more choices of sounds for different types of exercise routines and exercise goals.

Regarding claim 13, Lee discloses an audio pacing device (**10**) with a first sensing unit (**40**) and a first parameter (**col. 9 lines 38-41**) and a switch (**fig. 2; #56**) to alternate between different modes of use (**col. 5 lines 29-38**).

Lee in view of Curtin doesn't disclose a second sensor as part of the alternate / second modes.

However, McHugh teaches another audio pacing device (**10**) with a different mode of operation having an alternate sensing unit (**20**) and parameter (**col. 5 line 61 – col. 6 line 6**).

Since Richardson teaches that during an exercise event a user would be concerned with speed pacing and heart rate (**col. 1 lines 8-30**), it therefore would have

been obvious to one of ordinary skill in the art at the time the invention was made to include McHugh's sensing unit and parameter as an alternate / second mode in the device of Lee. Doing so would allow the user to be aware of their speed pacing as well as heart rate during an exercise routine.

6. **Claims 14, 16, 18, and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lee et al. (US Patent 6,837,827)** hereinafter referred to as **Lee** in view of **Lauffer et al. (US Patent 5,215,469)** hereinafter referred to as **Lauffer**.

Regarding claim 14, Lee discloses an audio pacing method, comprising the steps of:

receiving a parameter of a user in physical exercise from a sensing unit (**40; col. 9 lines 38-41**);

determining whether intensity of the parameter of the user should be increased, decreased or maintained by using the parameter of the user from the sensing unit and a predetermined reference value (**col. 9 lines 51-66**);

selecting an audio signal having a tempo that enables the user to increase, decrease or maintain the intensity (**col. 9 lines 25-36 and 60-66**), further comprising the step of adjusting the tempo of a selected audio signal up to a predetermined percentage of the tempo (**col. 9 lines 51-66**).

Although the examiner considers Lee to disclose a the processing unit being configured to adjust the tempo of a selected audio signal up to a predetermined percentage of the predetermined tempo value, Lauffer further teaches that it is known to have a processing unit (**100, 110**) configured to adjust the tempo of a selected audio signal up to a predetermined percentage of the predetermined tempo value (**figs. 3 and 4; col. 4 line 62 – col. 5 line 34**). In the example given, the tempo is increased 150% of the original.

Given the teachings of Lauffer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the processor of Lee with the tempo control means of Lauffer. Doing so would allow the device to be programmed to achieve specific rates of tempo and better guide the user toward a specific pace.

Regarding claim 16, Lee discloses the step of a user selecting the said predetermined reference value from a group of reference values or a programmed exercise routine (**col. 9 lines 21-26**).

Regarding claim 18, Lee discloses the parameter is a step speed rate (**col. 9 lines 33-41**).

Regarding claim 19, Lee discloses the sensing unit (**40**) a step-speed measurement unit (**col. 9 lines 33-41**).

7. **Claim 17** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Lee et al. (US Patent 6,837,827)** hereinafter referred to as **Lee** in view of **Lauffer et al. (US Patent 5,215,469)** hereinafter referred to as **Lauffer** in view of **Curtin (US Patent 5,986,200).**

Regarding claim 17, Lee discloses stored audio signals, but fails to disclose the format of the signals.

However, Curtain teaches using an MPEG-4 format to store audio signals (**col. 3 lines 1-22**).

Given the teachings of Curtain, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the MPEG-4 file format of Curtain with the audio signals of Lee. Doing so would allow the device to hold a large number of audio signals in a relatively small amount of memory.

Response to Arguments

8. Applicant's arguments filed 27 March 2009 have been fully considered but they are not persuasive.

9. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

10. Regarding applicant's argument that Lee fails to disclose the processing unit being further configured to adjust the tempo of a selected audio signal up to a predetermined percentage of the predetermined tempo value the examiner respectfully disagrees. The examiner contends that although Lee is silent as to the specific

percentages the audio signal is adjusted to, that when the signal is changed, as described in col. 9 line 38 – col. 10 line 7, there would inherently be change in the percentage of the tempo with respect to an initial audio cue frequency. The examiner further notes that the applicant has claimed a plurality of audio signals having predetermined tempos, and then claims wherein the processing unit adjusts the tempo of the selected audio signal. The examiner would appreciate clarification if the applicant is stating that new signals are selected to "adjust" the initial audio signal, or if a single audio signal is selected and adjusted to encourage a certain exercise performance.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew M. Tecco whose telephone number is 571-270-3694. The examiner can normally be reached on 5/4/9; 8-5 M-R 1st Fri off, 2nd Fri 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LoAn Thanh can be reached on 571-272-4966. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew M Tecco/
Examiner, Art Unit 3764

/Fenn C Mathew/
Primary Examiner, Art Unit 3764
June 22, 2009